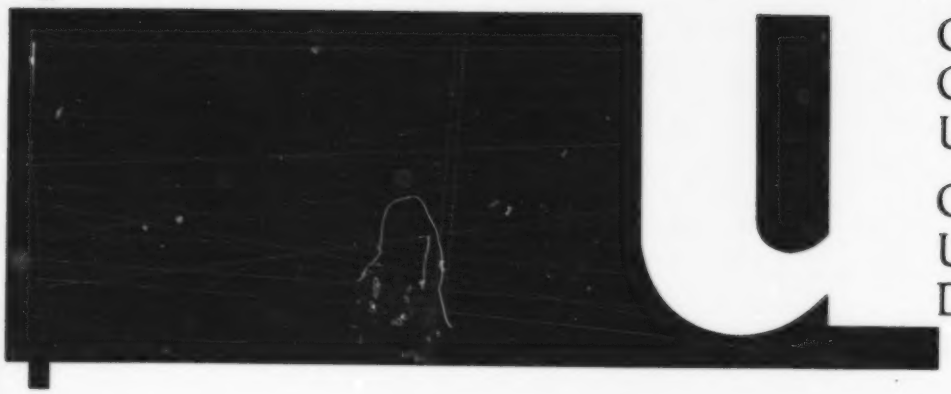
ONTARIO UNIVERSITIES STATISTICAL COMPENDIUM 1970-87

PART A
MACRO-INDICATORS



COUNCIL OF ONTARIO UNIVERSITIES

CONSEIL DES UNIVERSITÉS DE L'ONTARIO

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PART A MACRO-INDICATORS

Prepared by the
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GENERAL CAVEAT

The reader of this compendium is cautioned that the number of institutions included in the various analyses contained in this report may vary from year to year and from table to table. If figures from different tables are being used, the reader should refer to the appropriate footnotes to ensure that the institutional coverage is comparable. It may be necessary to refer to the raw data contained in Part B of this compendium to derive comparable figures.

The reader should also be aware that the financial, enrolment and faculty data presented in this report may not be strictly comparable over the time period under study. Over the years changes have been effected in the definitions and rules governing the reporting of these data. These changes have been most acute with respect to the enrolment data and are documented in the appropriate footnotes.

A0.0 INTRODUCTION

With increasingly overwhelming amounts of detailed data on post-secondary education being turned out each year, decision makers in recent years have hoped for a concise series of macro-indicators which would unambiguously measure what was taking place and assist in focusing on what decisions had to be made. Within Ontario, this concept was initially raised when the Ministry of Colleges and Universities began considering the development of programme costs in 1973-74. The Council of Ontario Universities, in its June 1974 brief on operating grants *A Statement of Principles...*, proposed the development of essential macro-indicators. A year later the Operating Grants Committee in its 1975 brief recommended that COU join with MCU and the Ontario Council on University Affairs in a tripartite approach to the development of appropriate indicators. In June the Chairman of OCUA formally established the Tripartite Committee on Macro-Indicators which produced two reports, *Trends in Student-Faculty Ratios in Ontario Universities, 1970-71 to 1975-76* published in March 1977 and *Preliminary Discussion Paper on Macro-Indicators* in December 1977. In November 1977 COU established an Ad Hoc Committee on Macro-Indicators which was to advise Council on the disposition of reports from the Tripartite Committee and on the matter of macro-indicators in general.

A principal concern of the COU Committee regarding the reports of the earlier Tripartite Committee arose from the multiplicity of objectives to be served by the development of a set of macro-indicators. This multiplicity had given rise to classifying as macro-indicators four different elements; something which might truly be termed a macro-indicator, supporting data which might be used to generate such indicators, complementary analyses which might be used to enhance understanding of both indicators and data, and micro-indicators. Clearly, specific and limited objectives are desirable (in the first instance at least) and the COU Committee identified the basic objectives, from COU's perspective, to be:

- To measure the real resources available to the Ontario university system as a function of the volume of activity therein, over time;
- To compare trends in the resources made available in other jurisdictions and to other provincially funded activities; and
- Ultimately, to measure the changes in resource distribution within institutions, using data comparable between institutions.

The COU Committee noted that these objectives had been defined as COU objectives and, as such, they were a statement of COU priorities in the general area of macro-indicators. This was in no way intended to suggest that Council would not identify additional objectives in future.

The COU Committee initially devoted considerable time and effort examining the conceptual framework within which macro-indicators could be developed. In the end, the Committee concluded that it should not aim at development of a short series of "magic numbers", but that Council's objectives would best be met by publication of an interpretative statistical compendium, containing macro-indicators, complementary analyses and supporting data. The Committee was convinced that meaningful indicators could only be properly understood in the context of supporting statistical data.

The first edition of the statistical compendium, covering the period 1970-71 to 1978-79, was released in October 1980. The present edition includes the original statistical material with the addition of figures up to and including 1986-87. (Data for 1985-86 and 1986-87 have not been included in Section A1.4 which examines interprovincial comparisons. The material in this section is prepared by the Tripartite Committee on Interprovincial Comparisons.)

A0.1 ORGANIZATION OF THE COMPENDIUM

The Committee believed that the statistical compendium should be designed to simplify its use by as wide and as varied a group of users as possible. It therefore seemed appropriate to present the compendium material in two parts. Part A is directed to the general user and contains the macro-indicators and complementary analyses, together with commentary on the material therein and a glossary of terms and definitions. In addition, derived system data which have been used in development of the indicators have been provided in an appendix to Part A. Part B is directed to the user who may wish to trace the development of the various indicators and contains the supporting data. To facilitate usage of this compendium, the table of contents in Part A also lists the contents of Part B. (It should be noted that many of the footnotes to the tables in Part A refer the user to sections in Part B.)

Before examining the indicators a few general observations are in order. Historical time series are presented covering the years 1970-71 to 1986-87. The base year was selected to reflect the first year of publication of financial data by the Committee of Finance Officers - Universities of Ontario (COFO-UO). Many of the indicators in this compendium are based on data contained in the COFO-UO reports. (The user will note that data for 1971-72 have not been included. In

1971-72 the universities switched from a fiscal year running from July to June to the current university fiscal year which runs from 1 May to 30 April. As a result of this transition, data for 1971-72 cover only a 10 month period and have been excluded from the analyses contained in this compendium.)

Many of the financially related indicators appearing in this compendium have been expressed in terms of "constant dollars", i.e. actual revenue or expenditures in a given year have been deflated to account fo the decreased value of the dollar in terms of purchasing power over the years. The principal difficulty encountered in formulating these indicators related to the choice of deflation indices. The most commonly used deflation index is the *Consumer Price Index* (CPI) computed monthly by Statistics Canada; as a result a number of the indicators employ the CPI as a deflator. However, the Committee did not feel that the CPI is particularly representative of the inflationary pressures which have had an impact on the university sector in recent years. Accordingly, a number of deflation indices have been used in this compendium.

During the seventies expenditures on salaries and benefits represented about 80% of university operating expenditures and non-salary expenditures accounted for the remaining 20%. To deflate non-salary expenditures the Committee employed the *Ontario University Non-Salary Price Index* (OUNSPI). Greater difficulty was encountered in selecting an appropriate salary deflator. In theory the dollar deflator used should be as broadly based as possible. In the area of salaries and wages, the most broadly based index of earnings is the Statistics Canada industrial composite, comprising about 55% of the active labour force in Ontario. During the seventies, however, the rate of increase in average earnings in the industrial composite was steeper than the rate of increase experienced in the university sector. The Committee, therefore, chose to compute constant dollar revenue and expenditures using two deflation indices which are a combination of 0.8 of a salary index and 0.2 of a non-salary index. In both cases OUNSPI is used as the non-salary component.

The first index, the *COU Combined Index*, uses the industrial composite index as the salary component. This index might be said to measure the extent of inflationary pressure on the university sector.

The second index, the *Combined Index Based on Actual Academic Salary Increases*, uses actual average salary data for professorial ranks in Ontario universities as the salary component. As increases in academic salaries have generally been less than salary increases awarded in the private sector, this index might be said to measure the volume of goods and services universities have been able to purchase, notwithstanding inflationary pressures.

In addition, two similar deflation indices have been developed to deflate research expenditures which are a combination of 0.6 of the salary component and 0.4 of the non-salary component. (This 60/40 split is more representative of the pattern of salary and non-salary expenditures in the research area.)

Users will note that many of the tables in Part B of the compendium present data at the institutional level and yet institutional break-downs are not carried forward into Part A. This restriction in the present report to development of indicators at the system level represents a practical, rather than a policy, limitation. Any attempt to develop indicators that would permit valid interinstitutional comparisons will lead to the inevitable compounding of technical problems. The Committee believed that such indicators would have to be generated at a programme level or at least be designed to take account of the varying mix of programmes extant at each institution.

A0.2 CHANGES FROM PREVIOUS EDITIONS

Users of previous editions of this compendium will have observed that figures expressed in constant dollar terms have varied marginally from edition to edition. This has been due to minor revisions in both the CPI and OUNSPI cost indices in succeeding versions of the compendium.

Commencing with the 1982-83 edition of the compendium the CPI and OUNSPI cost indices have been rebased. In previous years these cost indices employed a base of 1970-71 equal to 100.0. In the 1982-83 edition the base for these cost indices was revised so that 1980-81 was equal to 100.0. Commencing with the 1983-84 edition, it was decided that the cost indices should employ the most recent year as the base equal to 100.0. This means that in the current report the cost index values for years prior to 1986-87 will represent a percentage of the 1986-87 value. In terms of the figures expressed in constant dollar terms in this compendium, it means that such figures are radically different from corresponding figures in earlier editions. It should, however, be pointed out that indices computed for many of the indicators in the present edition of the compendium are still quite similar to values found in earlier editions.

A1.0 MACRO-INDICATORS

This section of the statistical compendium presents an initial series of macro-indicators. Included with each indicator is a brief description of what, in the Committee's view, the indicator was intended to measure, together with an examination of the trend data.

A1.1 RATIOS OF OPERATING REVENUE TO ELIGIBLE FTE ENROLMENT AND BIU'S

The Committee identified operating revenue in constant dollars per FTE student and per BIU as perhaps the most significant gross indicator of the financial health of the Ontario university system. Viewed over time, and at the system level, this indicator measures the gains or losses in resources available to universities as a function of teaching activity. Three series of values for this indicator (based on three different deflation indices) are presented in Table A1-1.

Examination of Table A1-1 shows that the rate of change in the value of revenue per FTE student or per BIU is dependent on the deflation index used. For example, revenue per FTE student in 1986-87 varied from 70% of the 1970-71 level when the COU Combined Index was used as the deflator, to 79% when the CPI was employed. While the absolute values may vary, the trends in all three series are quite similar - steady declines from 1970-71 to 1975-76, some improvement in the next three years, downturns again for three years and then relatively constant for a number of years with some improvement in the more recent years. An interesting observation that may be made from this table is that the rates of change (as measured by the index for each indicator) for revenue per FTE student and revenue per BIU are remarkably similar in all three series of values.

A1.2 RATIOS OF RESEARCH EXPENDITURES TO FULL-TIME FACULTY

This indicator measures the gains or losses in resources available to universities for research (as reported under "Sponsored Research" in the COFO-UO reports) as a function of full-time faculty holding professorial rank (full, associate or assistant professor). Table A1-2 presents three series of values for this indicator based on three different deflation indices.

As was the case in the previous indicator, the rate of change in the value of research expenditures per full-time faculty member from year to year is dependent on the deflation index used. In 1986-87 the value ranged from 93% of the 1970-71 value when the COU Combined Research Index was used, to 106% when the CPI was used as the deflator. The 1986-87 value using the Combined Research Index Based on Actual Academic Salary Increases was roughly midway between these two series. All three series showed a steady decline in value from 1970-71, reaching a low in 1976-77. The ratios increased steadily in the following years and reached a peak in 1984-85, exceeding the 1970-71 level when the Combined Research Index Based on Actual Academic Salary Increases or the CPI were employed. All three ratios showed slight declines in each of the two most recent years.

A1.3 PERCENTAGE DISTRIBUTION OF OPERATING EXPENDITURES

One potential avenue of expression for changes in levels of global funding is the internal distribution of funds by the Ontario universities. Table A1-3 presents an analysis of the percentage distribution of operating expenditures among broad categories.

Examination of this table shows that academic salaries increased marginally from 42% of total expenditures in 1970-71 to a peak of 44% in 1977-78 and have declined since then to 43% in 1986-87. Non-academic salaries have remained quite stable over the period, representing about 29-30% of total operating expenditures. In the area of employee benefits there has been a steady increase from just under 6% of total expenditures in 1970-71 to 9% in 1986-87. These three expenditure categories when combined have shown an increase from 77% in 1970-71 to 81% in 1986-87. This increase has been at the expense of non-salary expenditures. Non-salary expenditures represented 23% of total operating expenditures in 1970-71 but only 19.5% in 1986-87.

A1.4 INTERPROVINCIAL COMPARISONS

The Committee regarded comparative analyses of provincial expenditure on higher education as a major area of macro-indicators development. The Committee was indebted to the Tripartite Committee on Interprovincial Comparisons, comprised of representatives of COU, MCU and OCUA, for the development of indicators in this area. The Tripartite Committee has published a series of eight indicators covering the period 1975-76 to 1984-85. The following description of these indicators has been extracted from the report of the Tripartite Committee.

"...the (Tripartite) Committee focused on three major questions: how much financial support is provided to universities; how does university financing fit into each government's priorities; and what proportion of provincial resources is directed towards university financing? Eight specific indicators were selected as the most useful in answering these questions:

1. Provincial operating grants per full-time equivalent (FTE) student;
2. Provincial operating grants per capita;
3. Provincial operating grants plus student aid per capita;
4. Provincial operating grants plus fees per FTE student;
5. Total operating income per FTE student;
6. Provincial operating grants plus student aid as a percentage of provincial gross general (government) expenditure;
7. Provincial operating grants per $1,000 of provincial personal income; and
8. Total university operating expenditure as a percentage of provincial gross domestic product.

"The first indicator represents the level of funding provided by provincial governments, on a per FTE student basis, both to institutions within the province and to institutions outside the province. In the latter case the government of one province provides funds to an institution located in another province, to support the training of students originating in the province but enrolled in special programs in institutions located outside the province's boundaries. Indicator Two measures the various provincial governments' support for universities, within or outside the province, per capita of provincial population.

"Indicator Three compares, on a per capita basis, total provincial government support of university education, regardless of whether the funds go to the universities in the form of operating grants or to students in the form of student aid.

"The fourth and fifth indicators are based only on the revenues of institutions within the province. The fourth indicator allows for comparisons between provinces, on a per FTE student basis, of the two major sources of university income - provincial operating grants and student fees. In many provinces the provincial government exercises control not only over the level of operating

grants but also over student fee rates. The fifth indicator adds in all other university operating income and shows, on a per FTE student basis, operating support from all sources received by institutions within each jurisdiction.

"Indicator Six shows each province's percentage of its government's expenditures directed towards university education in the form of provincial operating grants and student aid. Provincial government expenditures are represented by the measure of Gross General Expenditure, developed by Statistics Canada to make provincial government financial data comparable among provinces.

"The seventh and eighth indicators recognize that all provinces do not have an equal ability to pay for university education for their citizens. The seventh indicator measures the ability of provinces to support their universities based on the level of personal income in each of the provinces. The eighth indicator measures the share of provincial economic activity, Provincial Gross Domestic Product (GDP), attributable to university expenditures."

The eight indicators from the report of the Tripartite Committee are reproduced in Table A1-4, with the addition of rankings by province in the first and final years.

The first series of three indicators shows that the financial support provided to the Ontario universities has deteriorated over the ten-year period with respect to other provinces. Indicator 1 shows Ontario's position slipping from 8th to 10th. Indicator 2 shows Ontario slipping from 7th to 8th and Indicator 3 from 6th to 8th.

Indicators 4 and 5 (provincial operating grants plus fees per student and total operating income per student) show that Ontario maintained its 7th place position over the ten-year period.

Indicator 6 shows that provincial operating grants (plus student aid) to Ontario universities as a percentage of gross general expenditure improved. Ontario was the 4th ranked province in 1975-76 but was ranked 2nd in 1984-85.

The final two indicators show that in 1984-85 the proportion of provincial resources going to university financing in Ontario was lower than was the case in 1975-76. While Ontario's ranking improved from 10th to 9th under Indicator 7 remained 8th in both years under Indicator 8, the percentages shown were lower in 1984-85.

Table A1-1

Ratios of Operating Revenue (in Constant Dollars) to Eligible FTE Enrolment and BIU's in Ontario Universities

	COU Combined Index				Combined Index Based on Actual Academic Salary Increases				CPI			
	Revenue /FTE $	Index	Revenue /BIU $	Index	Revenue /FTE $	Index	Revenue /BIU $	Index	Revenue /FTE $	Index	Revenue /BIU $	Index
1970-71	11,292	100.0	6,577	100.0	10,601	100.0	6,174	100.0	10,119	100.0	5,894	100.0
1972-73	10,208	90.4	5,880	89.4	9,959	93.9	5,736	92.9	9,722	96.1	5,600	95.0
1973-74	9,506	84.2	5,534	84.1	9,397	88.6	5,470	88.6	8,959	88.5	5,215	88.5
1974-75*	8,982	79.5	5,253	79.9	8,982	84.7	5,253	85.	8,518	84.2	4,962	84.5
1975-76	8,601	76.2	5,061	76.9	8,721	82.3	5,132	83.1	8,351	82.5	4,914	83.4
1976-77	8,701	77.1	5,131	78.0	8,830	83.3	5,207	84.3	8,719	86.2	5,142	87.2
1977-78	8,969	79.4	5,240	79.7	9,073	85.6	5,302	85.9	8,986	88.8	5,251	89.1
1978-79	9,035	80.0	5,288	80.4	9,200	86.8	5,385	87.2	8,891	87.9	5,204	88.3
1979-80	8,640	76.5	5,027	76.4	8,872	83.7	5,162	83.6	8,528	84.3	4,962	84.2
1980-81	8,154	72.2	4,746	72.2	8,390	79.1	4,884	79.1	7,976	78.8	4,643	78.8
1981-82	7,765	68.8	4,521	68.7	8,031	75.8	4,676	75.7	7,594	75.0	4,422	75.0
1982-83	7,776	68.9	4,542	69.1	7,767	73.3	4,537	73.5	7,564	74.8	4,419	75.0
1983-84	7,585	67.2	4,448	67.6	7,726	72.9	4,531	73.4	7,508	74.2	4,403	74.7
1984-85	7,582	67.1	4,447	67.6	7,776	73.4	4,560	73.9	7,607	75.2	4,461	75.7
1985-86	7,704	68.2	4,507	68.5	7,817	73.7	4,573	74.1	7,776	76.8	4,549	77.2
1986-8/	7,935	70.3	4,648	70.7	7,935	74.9	4,648	75.3	7,935	78.4	4,648	78.9

Notes: The number of institutions included in the figures varies from year to year. (Refer to Footnote 1 on Table I-2 in Appendix I for details on the institutions included in each year's figures).

Sources: Revenue data were obtained from Table I-2, enrolment and BIU's from Table I-3 in Appendix I. Please refer to the footnotes for these tables.

Table A1-2

Ratios of Research Expenditures (in Constant Dollars, Deflated) to Full-Time Faculty (Professorial Ranks) in Ontario Universities

	COU Combined Research Index		Combined Research Index Based on Actual Academic Salary Increases		CPI	
	Research Expenditures/ FT Faculty $	Index	Research Expenditures/ FT Faculty $	Index	Research Expenditures/ FT Faculty $	Index
1970-71	34,825	100.0	33,108	100.0	30,528	100.0
1972-73	26,731	76.8	26,221	79.2	24,504	80.3
1973-74	25,590	73.5	25,286	76.4	23,347	76.5
1974-75	24,708	70.9	24,708	74.6	22,947	75.2
1975-76	24,602	70.6	24,895	75.2	23,284	76.3
1976-77	23,143	66.5	23,445	70.8	22,562	73.9
1977-78	25,200	72.4	25,400	76.7	24,716	81.0
1978-79	26,967	77.4	27,365	82.7	26,158	85.7
1979-80	26,593	76.4	27,085	81.8	26,035	85.3
1980-81	27,593	79.2	28,181	85.1	26,911	88.2
1981-82	30,120	86.5	30,897	93.3	29,496	96.6
1982-83	32,814	94.2	32,774	99.0	32,036	104.9
1983-84	32,459	93.2	32,909	99.4	32,057	105.0
1984-85	33,632	96.6	34,261	103.5	33,778	110.6
1985-86	32,815	94.2	33,156	100.1	33,191	108.7
1986-87	32,456	93.2	32,456	98.0	32,456	106.3

Notes: The number of institutions included in the figures varies from year to year. (Refer to Footnote 1 on Table I-4 in Appendix I for details on the institutions included in each year's figures).

Sources: Data on research expenditures were obtained from Table I-4. (Please refer to the footnotes for this table.) Data on full-time faculty in the professorial ranks (full, associate and assistant professors) were obtained from Statistics Canada's Salaries and Salary Scales for Full-Time Teaching Staff at Canadian Universities.

Table A1-3

Percentage Distribution of Operating Expenditures
in Ontario Universities

	Academic Salaries	Non-Academic Salaries	Employee Benefits	Total Salaries & Benefits	Non Salary Items
1970-71	41.8	29.3	5.8	76.9	23.1
1972-73	43.4	30.2	6.8	80.4	19.6
1973-74	43.3	30.0	6.9	80.2	19.8
1974-75	43.2	29.7	7.1	80.0	20.1
1975-76	43.5	29.9	7.7	81.1	18.9
1976-77	44.0	29.7	8.2	81.8	18.2
1977-78	44.0	29.7	8.2	81.9	18.1
1978-79	43.9	29.6	8.4	82.0	18.0
1979-80	43.9	29.7	8.1	81.7	18.3
1980-81	43.9	29.4	8.0	81.3	18.7
1981-82	43.7	29.2	8.3	81.3	18.7
1982-83	43.6	29.4	8.7	81.7	18.3
1983-84	42.7	29.6	9.0	81.3	18.7
1984-85	42.6	29.4	9.0	81.0	19.0
1985-86	42.3	29.4	9.2	80.9	19.1
1986-87	42.6	29.1	8.8	80.5	19.5

Note: The number of institutions included in the figures varies from year to year. (Refer to Footnote 1 on Table I-2 in Appendix I for details on the institutions included in each year's figures.)

Sources: Data were obtained from Table B2-2 in Part B of this compendium.

Table A1-4

Indicator 1 - Provincial Operating Grants Per Student

	1975-76 $	1976-77 $	1977-78 $	1978-79 $	1979-80 $	1980-81 $	1981-82 $	1982-83 $	1983-84 $	1984-85 $
British Columbia	3,489.69 (4)	3,954.54	4,418.53	4,914.50	5,211.90	5,538.37	6,228.95	6,204.88	5,885.95	5,864.97 (4)
Alberta	4,052.91 (1)	4,358.39	4,797.26	5,340.34	5,814.51	6,284.50	6,811.75	7,328.40	7,182.33	7,088.86 (1)
Saskatchewan	3,410.23 (5)	3,767.36	4,107.69	4,616.38	5,097.90	5,303.85	5,619.08	6,149.10	6,074.67	6,236.73 (3)
Manitoba	3,015.67 (6)	3,452.50	3,873.88	4,123.66	4,770.83	4,499.30	5,062.45	5,361.53	5,582.07	5,704.62 (6)
Ontario*	2,913.06 (8)	3,264.81	3,669.16	4,001.94	4,139.66	4,273.00	4,475.18	4,820.87	5,000.47	5,179.54 (10)
Quebec	3,751.68 (3)	4,078.58	4,449.41	4,657.05	5,299.45	5,934.99	6,176.34	5,915.45	5,712.63	5,728.59 (5)
New Brunswick	3,002.90 (7)	3,444.99	3,904.80	4,363.64	4,762.27	4,929.36	4,998.22	5,269.68	5,175.00	5,494.65 (7)
Nova Scotia	2,835.72 (9)	3,232.94	3,497.05	3,818.76	4,074.20	4,378.63	4,907.57	5,079.13	5,154.43	5,360.08 (8)
Prince Edward Island	2,589.42 (10)	2,973.75	3,030.10	3,544.23	4,246.25	4,440.86	4,719.64	5,022.65	5,088.58	5,282.60 (9)
Newfoundland	3,809.35 (2)	4,157.44	4,624.91	5,485.42	5,993.67	5,683.74	5,847.28	6,911.51	7,787.63	6,994.26 (2)
Canada	3,313.45	3,677.54	4,087.45	4,444.47	4,828.20	5,140.88	5,461.08	5,619.99	5,610.25	5,690.37
Canada (Excl. Ontario)	3,563.12	3,934.93	4,331.76	4,688.45	5,212.76	5,622.67	6,007.24	6,058.46	5,934.54	5,961.25

Notes:

1. The figures for British Columbia, Alberta and Manitoba do not reflect payments made to Saskatchewan for Veterinary Medicine students. These students are included in the Saskatchewan data. These payments are not included in Saskatchewan's operating grants.

2. Rank is indicated in parentheses.

Source: Interprovincial Comparisons of University Financing, Eighth Report of the Tripartite Committee on Interprovincial Comparisons, November, 1987.

*Ontario figures were not derived from data found elsewhere in this compendium.

Table A1-4

Indicator 2 - Provincial Operating Grants Per Capita

	1975-76 $	1976-77 $	1977-78 $	1978-79 $	1979-80 $	1980-81 $	1981-82 $	1982-83 $	1983-84 $	1984-85 $
British Columbia	66.93 (6)	76.35	84.21	92.18	95.32	102.07	116.04	123.01	119.88	113.91 (9)
Alberta	90.52 (1)	96.79	104.30	110.04	112.66	117.62	131.63	155.87	166.02	174.67 (1)
Saskatchewan	67.47 (5)	75.39	80.76	87.50	93.60	99.51	112.16	123.29	128.51	132.48 (6)
Manitoba	68.81 (4)	79.17	88.18	88.64	100.01	100.70	114.66	133.50	146.99	148.27 (4)
Ontario*	65.89 (7)	74.72	80.19	83.60	86.61	92.13	100.41	112.79	117.95	123.99 (8)
Quebec	73.88 (3)	82.28	96.05	108.45	121.86	141.94	154.50	155.08	156.22	163.66 (2)
New Brunswick	64.51 (8)	70.98	76.91	83.53	90.98	98.59	108.98	122.05	127.46	133.97 (5)
Nova Scotia	75.04 (2)	84.74	91.80	98.37	103.46	115.32	130.01	143.52	152.38	160.05 (3)
Prince Edward Island	46.87 (10)	53.04	62.10	66.66	76.23	82.21	89.39	102.28	108.09	112.78 (10)
Newfoundland	59.50 (9)	66.83	76.29	81.46	92.28	98.41	111.34	120.94	125.83	128.44 (7)
Canada	70.37	78.91	87.39	94.16	100.94	110.55	121.95	131.90	135.94	140.83
Canada (Excl. Ontario)	72.89	81.27	91.45	100.12	108.93	120.74	133.80	142.44	145.91	150.23

Notes:

1. The figures for British Columbia, Alberta and Manitoba do not reflect payments made to Saskatchewan for Veterinary Medicine students.

2. Rank is indicated in parentheses.

Source: Interprovincial Comparisons of University Financing, Eighth Report of the Tripartite Committee on Interprovincial Comparisons, November, 1987.

*Ontario figures were not derived from data found elsewhere in this compendium.

Table A1-4

Indicator 3 - Provincial Operating Grants Plus Student Aid Per Capita

	1975-76 $	1976-77 $	1977-78 $	1978-79 $	1979-80 $	1980-81 $	1981-82 $	1982-83 $	1983-84 $	1984-85 $
British Columbia	69.81 (7)	78.73	86.85	95.19	98.86	105.60	120.47	129.26	123.76	113.91 (10)
Alberta	93.10 (1)	99.41	106.81	112.56	115.35	120.20	134.12	158.86	173.05	183.06 (1)
Saskatchewan	70.84 (5)	79.04	84.75	92.56	98.13	104.58	117.17	129.94	136.53	140.69 (7)
Manitoba	75.61 (4)	85.44	92.86	93.12	104.86	105.84	120.87	140.44	153.59	154.95 (5)
Ontario*	70.81 (6)	80.17	86.65	89.03	92.10	97.85	106.09	119.45	124.71	130.81 (8)
Quebec	77.96 (3)	87.02	102.40	114.63	129.62	151.16	165.37	168.04	171.88	182.58 (2)
New Brunswick	67.78 (8)	74.37	80.59	87.26	95.42	104.78	117.21	134.81	137.79	146.17 (6)
Nova Scotia	79.67 (2)	88.57	95.22	102.60	108.35	122.24	138.83	150.12	159.01	168.21 (3)
Prince Edward Island	52.27 (10)	56.82	65.76	70.45	80.55	87.20	96.18	113.20	116.42	123.80 (9)
Newfoundland	67.02 (9)	75.66	85.10	87.80	99.98	107.56	120.63	141.82	145.80	159.72 (4)
Canada	74.68	83.52	92.75	99.15	106.50	116.75	128.83	140.36	145.18	151.00
Canada (Excl. Ontario)	76.86	85.41	96.19	104.85	114.53	127.20	141.33	151.88	156.53	162.27

Notes:

1. The figures for British Columbia, Alberta and Manitoba do not reflect payments made to Saskatchewan for Veterinary Medicine students.

2. Rank is indicated in parentheses.

Source: Interprovincial Comparisons of University Financing, Eighth Report of the Tripartite Committee on Interprovincial Comparisons, November, 1987.

*Ontario figures were not derived from data found elsewhere in this compendium.

Table A1-4

Indicator 4 - Provincial Operating Grants Plus Fees Per Student

	1975-76 $	1976-77 $	1977-78 $	1978-79 $	1979-80 $	1980-81 $	1981-82 $	1982-83 $	1983-84 $	1984-85 $
British Columbia	3,900.25 (4)	4,357.66	4,892.08	5,405.47	5,709.26	6,083.79	6,850.60	6,989.23	6,739.90	6,952.52 (4)
Alberta	4,462.95 (1)	4,850.36	5,294.21	5,888.16	6,448.62	6,899.71	7,440.28	8,062.58	7,961.46	7,972.46 (2)
Saskatchewan	3,865.98 (5)	4,349.37	4,720.16	5,288.08	5,769.05	6,033.75	6,381.43	7,092.37	7,255.65	7,523.59 (3)
Manitoba	3,423.43 (9)	3,887.91	4,318.80	4,660.71	5,350.19	5,093.52	5,752.73	6,058.05	6,380.93	6,573.48 (8)
Ontario*	3,564.01 (7)	3,909.33	4,430.28	4,771.43	4,957.01	5,199.20	5,529.15	6,056.01	6,351.87	6,573.50 (7)
Quebec	4,159.55 (3)	4,496.14	4,871.31	5,071.82	5,745.88	6,389.06	6,659.14	6,396.00	6,189.54	6,206.94 (9)
New Brunswick	3,595.95 (6)	4,028.59	4,542.10	4,999.77	5,454.91	5,615.82	5,758.85	6,176.40	6,177.64	6,652.47 (6)
Nova Scotia	3,500.86 (8)	3,892.33	4,215.77	4,580.05	4,906.88	5,284.55	6,033.69	6,376.93	6,576.41	6,843.29 (5)
Prince Edward Island	2,976.77 (10)	3,389.83	3,543.28	4,176.81	4,745.73	5,096.24	5,388.48	5,655.60	5,770.98	5,889.88 (10)
Newfoundland	4,337.94 (2)	4,750.06	5,250.11	6,132.43	6,660.13	6,368.52	6,566.28	7,928.52	8,848.80	8,088.47 (1)
Canada	3,836.21	4,212.82	4,677.63	5,044.54	5,468.63	5,831.89	6,231.75	6,501.04	6,559.67	6,696.68
Canada (Excl. Ontario)	4,005.94	4,402.08	4,822.10	5,195.13	5,754.43	6,183.19	6,621.04	6,745.26	6,670.20	6,762.01

Notes:

1. New Brunswick - Mount Allison University fiscal period was for ten months in 1976-77. Universite de Moncton and St. Thomas University fiscal period was for ten months in 1977-78. University of New Brunswick fiscal period was for ten months in 1978-79.

2. Nova Scotia - St. Francis Xavier University fiscal period was for ten months in 1974-75. Dalhousie University fiscal period was for nine months in 1976-77. The fiscal period for six institutions was ten months in 1977-78.

3. P.E.I. - Ten month fiscal period in 1977-78.

4. Saskatchewan figures include the grants for Veterinary Medicine training received from British Columbia, Alberta and Manitoba.

5. Rank is indicated in parentheses.

Source: Interprovincial Comparisons of University Financing, Eighth Report of the Tripartite Committee on Interprovincial Comparisons, November, 1987.

*Ontario figures were not derived from data found elsewhere in this compendium.

Table A1-4

Indicator 5 - Total Operating Income Per Student

	1975-76 $	1976-77 $	1977-78 $	1978-79 $	1979-80 $	1980-81 $	1981-82 $	1982-83 $	1983-84 $	1984-85 $
British Columbia	4,056.41 (5)	4,576.82	5,011.05	5,519.27	5,842.22	6,230.75	7,093.49	7,177.68	6,890.44	7,115.42 (5)
Alberta	4,525.15 (2)	4,838.60	5,371.44	6,023.98	6,613.04	7,599.50	8,317.57	9,688.53	8,834.58	8,908.40 (1)
Saskatchewan	4,237.64 (4)	4,608.81	5,048.64	5,662.23	6,231.91	6,378.39	6,822.46	7,961.13	7,738.95	7,895.71 (3)
Manitoba	3,579.42 (9)	3,995.83	4,440.91	4,779.61	5,422.73	5,482.78	6,034.50	6,295.44	6,563.51	6,841.17 (6)
Ontario*	3,714.20 (7)	4,094.05	4,594.19	5,037.51	5,239.25	5,420.97	5,794.10	6,350.16	6,731.18	6,826.55 (7)
Quebec	4,372.94 (3)	4,743.11	5,164.80	5,347.21	5,889.84	6,682.59	7,009.33	6,874.26	6,689.17	6,773.71 (9)
New Brunswick	3,663.65 (8)	4,085.48	4,581.81	4,829.71	5,689.55	5,890.08	6,097.98	6,481.14	6,471.29	6,799.19 (8)
Nova Scotia	3,849.66 (6)	3,933.81	4,293.91	4,929.64	5,257.37	5,823.18	6,569.53	6,905.02	7,257.56	7,380.96 (4)
Prince Edward Island	3,360.12 (10)	3,394.19	3,255.86	4,417.63	4,972.97	5,073.01	5,565.54	5,648.87	5,687.98	6,062.22 (10)
Newfoundland	4,929.76 (1)	5,437.84	6,343.80	6,821.16	7,222.26	7,052.23	6,792.82	8,286.61	9,130.85	8,310.22 (2)
Canada	4,019.78	4,397.89	4,877.68	5,284.91	5,690.09	6,140.55	6,588.94	6,980.69	6,998.87	7,112.39
Canada (Excl. Ontario)	4,210.33	4,587.37	5,043.26	5,421.32	5,941.93	6,540.09	7,029.34	7,326.72	7,141.26	7,263.99

Notes:

1. New Brunswick - Mount Allison University fiscal period was for ten months in 1976-77. Universite de Moncton and St. Thomas University fiscal period was for ten months in 1977-78. University of New Brunswick fiscal period was for ten months in 1978-79.
2. Nova Scotia - St. Francis Xavier University fiscal period was for ten months in 1974-75. Dalhousie University fiscal period was for nine months in 1976-77. The fiscal period for six institutions was ten months in 1977-78.
3. P.E.I. - Ten month fiscal period in 1977-78.
4. Saskatchewan figures include the grants for Veterinary Medicine training received from British Columbia, Alberta and Manitoba.
5. Rank is indicated in parentheses.

Source: Interprovincial Comparisons of University Financing, Eighth Report of the Tripartite Committee on Interprovincial Comparisons, November, 1987.

*Ontario figures were not derived from data found elsewhere in this compendium.

Table A1-4

Indicator 6 - Provincial Operating Grants Plus Student Aid as a % of Provincial Gross General Expenditures

	1975-76 %	1976-77 %	1977-78 %	1978-79 %	1979-80 %	1980-81 %	1981-82 %	1982-83 %	1983-84 %	1984-85 %
British Columbia	4.53 (7)	4.96	4.90	4.91	4.62	4.20	4.17	3.68	3.34	3.00 (10)
Alberta	5.62 (2)	5.03	4.97	4.66	3.52	3.76	3.43	2.98	3.28	3.44 (7)
Saskatchewan	4.91 (6)	4.67	4.40	4.52	4.12	3.82	3.76	3.56	3.55	3.36 (9)
Manitoba	5.45 (3)	5.42	5.01	5.20	5.10	4.52	4.24	4.24	4.01	3.96 (5)
Ontario*	5.08 (4)	5.23	5.21	4.96	4.74	4.63	4.41	4.38	4.25	4.18 (2)
Quebec	4.95 (5)	4.75	4.98	4.91	5.15	5.13	4.90	4.43	4.15	4.18 (2)
New Brunswick	4.47 (8)	4.56	4.56	4.51	4.50	4.32	4.17	3.97	3.87	3.83 (6)
Nova Scotia	5.89 (1)	5.97	5.50	5.24	5.22	5.07	4.54	4.55	4.69	4.56 (1)
Prince Edward Island	3.01 (10)	3.21	3.06	3.15	3.28	3.11	3.20	3.31	3.35	3.40 (8)
Newfoundland	3.77 (9)	3.96	4.37	4.05	3.76	3.73	4.02	4.12	3.78	4.08 (4)
Canada	5.00	4.99	5.00	4.86	4.65	4.57	4.36	4.06	3.93	3.90
Canada (Excl. Ontario)	4.96	4.87	4.90	4.82	4.62	4.55	4.34	3.93	3.81	3.79

Notes:

1. The figures for British Columbia, Alberta and Manitoba do not reflect payments made to Saskatchewan for Veterinary Medicine students.

2. Rank is indicated in parentheses.

Source: Interprovincial Comparisons of University Financing. Eighth Report of the Tripartite Committee on Interprovincial Comparisons, November, 1987.

*Ontario figures were not derived from data found elsewhere in this compendium.

Table A1-4

Indicator 7 - Provincial Operating Grants Per $1,000 of Provincial Personal Income

	1975-76 $	1976-77 $	1977-78 $	1978-79 $	1979-80 $	1980-81 $	1981-82 $	1982-83 $	1983-84 $	1984-85 $
British Columbia	10.42 (9)	10.47	10.45	10.33	9.68	9.17	9.09	8.95	8.43	7.76 (10)
Alberta	14.94 (2)	14.40	13.97	13.10	11.87	10.90	10.26	11.04	11.26	11.34 (5)
Saskatchewan	10.93 (8)	11.44	12.09	11.83	11.30	10.74	9.16	10.05	10.23	10.26 (8)
Manitoba	11.95 (6)	12.66	13.00	11.79	12.12	11.13	10.49	11.14	11.75	10.86 (7)
Ontario*	10.06 (10)	10.18	10.01	9.47	8.87	8.44	7.94	8.18	8.05	7.89 (9)
Quebec	13.58 (5)	13.11	13.87	14.12	14.44	14.87	13.98	12.95	12.49	12.17 (4)
New Brunswick	14.11 (4)	14.12	14.12	13.90	13.41	13.31	13.01	13.25	12.78	12.54 (3)
Nova Scotia	15.93 (1)	16.10	15.76	15.14	14.24	14.39	14.26	14.24	14.15	13.79 (1)
Prince Edward Island	11.22 (7)	11.75	12.76	11.68	12.22	11.38	11.23	11.49	10.83	11.01 (6)
Newfoundland	14.61 (3)	14.61	15.26	15.24	15.21	14.85	14.33	14.16	13.77	13.24 (2)
Canada	11.83	11.79	11.93	11.61	11.22	10.95	10.35	10.31	10.10	9.83
Canada (Excl. Ontario)	13.00	12.84	13.18	12.99	12.72	12.52	11.83	11.63	11.40	11.09

Notes:

1. The figures for British Columbia, Alberta and Manitoba do not reflect payments made to Saskatchewan for Veterinary Medicine students.

2. Rank is indicated in parentheses.

Source: Interprovincial Comparisons of University Financing, Eighth Report of the Tripartite Committee on Interprovincial Comparisons, November, 1987.

*Ontario figures were not derived from data found elsewhere in this compendium.

Table A1-4

Indicator 8 - Total University Operating Expenditures as a % of Provincial Gross Domestic Product

	1975-76 %	1976-77 %	1977-78 %	1978-79 %	1979-80 %	1980-81 %	1981-82 %	1982-83 %	1983-84 %	1984-85 %
British Columbia	1.00 (9)	0 94	0.93	0.91	0.84	0.83	0.82	0.89	0.84	0.79 (10)
Alberta	0.95 (10)	0.95	1.00	0.86	0.77	0.74	0.74	0.91	0.84	0.85 (9)
Saskatchewan	1.08 (7)	1.08	1.14	1.09	1.00	0.88	0.87	1.03	1.04	0.97 (7)
Manitoba	1.19 (6)	1.18	1.23	1.14	1.09	1.11	1.06	1.17	1.21	1.15 (5)
Ontario*	1.05 (8)	1.01	1.01	0.97	0.90	0.88	0.86	0.94	0.92	0.88 (8)
Quebec	1.28 (5)	1.24	1.36	1.39	1.31	1.48	1.44	1.38	1.32	1.33 (4)
New Brunswick	1.65 (3)	1.52	1.50	1.11	1.31	1.66	1.57	1.59	1.52	1.46 (3)
Nova Scotia	2.12 (1)	1.80	1.88	1.91	1.85	2.14	2.13	2.05	2.02	1.90 (1)
Prince Edward Island	1.50 (4)	1.33	1.08	1.20	1.14	1.06	1.08	1.15	1.05	1.12 (6)
Newfoundland	1.95 (2)	1.84	2.00	1.87	1.68	1.72	1.60	1.69	1.58	1.47 (2)
Canada	1.14	1.10	1.14	1.10	1.02	1.05	1.03	1.09	1.05	1.02
Canada (Excl. Ontario)	1.20	1.16	1.22	1.18	1.10	1.15	1.13	1.18	1.13	1.12

Notes:

1. New Brunswick - Mount Allison University fiscal period was for ten months in 1976-77. Universite de Moncton and St. Thomas University fiscal period was for ten months in 1977-78. University of New Brunswick fiscal period was for ten months in 1978-79.
2. Nova Scotia - St. Francis Xavier University fiscal period was for ten months in 1974-75. Dalhousie University fiscal period was for nine months in 1976-77. The fiscal period for six institutions was ten months in 1977-78.
3. P.E.I. - Ten month fiscal period in 1977-78.
4. Saskatchewan figures include the grants for Veterinary Medicine training received from British Columbia, Alberta and Manitoba.
5. Rank is indicated in parentheses.

Source: Interprovincial Comparisons of University Financing, Eighth Report of the Tripartite Committee on Interprovincial Comparisons, November, 1987.

*Ontario figures were not derived from data found elsewhere in this compendium.

A2.0 COMPLEMENTARY ANALYSES

In this section of the statistical compendium a series of analyses is presented which, in the Committee's view, provided additional insights or supplementary information to the macro-indicators presented in Section A1.0.

A2.1 PERCENTAGE ANALYSIS OF OPERATING REVENUES BY SOURCE OF REVENUE

Table A2-1 presents a percentage analysis of operating revenue by major sources of revenue. Formula grants, as a percentage of total operating revenue, increased from 75.5% in 1970-71 to slightly over 78% in 1978-79 and then declined to 72.2% in 1986-87. Total provincial government grants declined from 80% to 77% during this period. The share of total revenue contributed by tuition fees showed considerable variation during this period, ranging from 14% to 19% of total operating revenue. The contribution by tuition fees has been relatively stable over the last five years and in 1986-87 tuition fees represented 18% of total operating revenue.

A2.2 RATIOS OF NON-SALARY OPERATING EXPENDITURES TO ELIGIBLE FTE ENROLMENT

Table A2-2 presents two series (employing OUNSPI and the CPI as deflators respectively) of ratios of non-salary operating expenditures in constant dollars to FTE enrolment. The ratios show a significant decline over the period for both series, reaching a low in 1982-83, and have increased in the years following this low point. Non-salary operating expenditures per FTE student in 1986-87 were at 54% of the 1970-71 level when OUNSPI was used as the deflator, and at 66% when the CPI was used. However, the trends for the two series differ somewhat. Using OUNSPI as the deflator, there was a decline throughout the period, substantial in the first four years and then tapering off, with smaller declines in later years. With the CPI used as the deflator, non-salary operating expenditures per FTE student showed substantial declines for the first four years but then remained relatively constant until 1980-81.

A2.3 RATIOS OF RESEARCH EXPENDITURES TO OPERATING EXPENDITURES

The period since 1970-71 has been characterized by reduced rates of increase in operating expenditures. There is some interest in whether levels of expenditure on research (as reported under "Sponsored Research" in the COFO-UO reports) have suffered a similar fate. Table A2-3 presents data on actual research expenditures and operating expenditures and the ratio of research to operating expenditures. Research expenditures in 1970-71 represented 16% of the level of operating expenditures. In succeeding years the ratio of research expenditures to operating expenditures declined steadily, reaching a low of 13% in 1976-77. This trend was reversed over the next six years, and in 1984-85 the level of research expenditures in relation to operating expenditures was 21%, considerably above the 1970-71 value. (The 1984-85 value may be even higher in relation to that of 1970-71 when one considers that the earlier expenditure figures excluded a number of institutions which, for the most part, have no research expenditures. Inclusion of these institutions in the 1970-71 figures would have lowered the ratio somewhat.) In the two most recent years the ratio has again declined.

A2.4 RATIOS OF BIU'S TO ELIGIBLE FTE ENROLMENT

Table A2-4 presents data showing FTE enrolment, BIU's and BIU/FTE enrolment ratios for the undergraduate and graduate sectors as well as totals for the Ontario Universities. Looking at the total figures first, the BIU/FTE enrolment ratio has remained relatively constant over the years, showing only a slight increase from 1.67 in the earlier years to 1.71 in more recent years.

However, this apparent stability in the total figures masks shifts at the undergraduate and graduate levels. At the undergraduate level, the ratio of BIU's/FTE enrolment climbed steadily from a ratio of 1.42 in 1970-71 to 1.54 in 1979-80 and has remained relatively constant since. On the other hand the ratio at the graduate level dropped from 3.68 in 1970-71 to 3.33 in 1975-76 and has risen to 3.49 in 1986-87. It should also be noted that total FTE enrolment showed an increase of 62% during this period but registered declines in 1977-78, 1978-79 and 1985-86.

A2.5 STUDENT/FACULTY RATIOS

Table A2-5 presents data showing FTE enrolment/FTE faculty ratios for the Ontario universities. The salaries and wages figures used in the calculations of FTE faculty include salaries paid to academic staff from lecturers to deans inclusive

as well as payments made to staff members without academic rank who are engaged in instruction and research. This latter group may include instructors, tutors, markers, demonstrators, teaching assistants, research assistants, invigilators, clinical assistants, and post-doctoral fellows, provided payments to these staff come out of university operating funds. If university student/faculty ratios are being compared to ratios for other sectors, care must be taken to ensure that comparable staff are included for the non-university sectors.

While student/faculty ratios could have been developed based only on ranked academic staff, the Committee concluded that it was more appropriate to include the fullest possible range of teaching resources. Such an approach will take account of potentially idiosyncratic variations in the distribution of teaching resources between ranked and non-ranked teaching staff which might occur from year to year or between institutions.

In recent years a number of alternative methods of calculating student/faculty ratios have been advanced, ranging from the simplified approach using aggregated data to the highly complex methodology requiring large amounts of detailed data. As the Committee feels that the principal focus should be on the changes in the ratio over time, it has concluded from its examination of a number of methodologies that the simplified approach adopted in this compendium yields valid results and that the extra efforts demanded by more complicated strategies would not be warranted. It should be noted, however, that the ratios presented in this compendium may differ from series of student/faculty ratios previously published by COU.

The ratio in Table A2-5 shows a steady deterioration from 1970-71 to 1975-76 as enrolment growth increased at a faster rate than did faculty additions. The ratio held steady in 1976-77 at the 1975-76 level as enrolment increased only marginally. The ratio improved in the next two years, due to slight increases in the numbers of FTE faculty coupled with unexpected decreases in the numbers of FTE students. (The decrease in FTE students in 1978-79 is masked in Table A2-5 by the addition of students at the church related affiliates in the figures for the first time.) The ratio showed steady deterioration in the period 1979-80 to 1983-84 as a result of enrolment increases in those years and remained constant in 1984-85. Improvements in the ratio were shown in 1985-86 and 1986-87 due to lower enrolment levels and increases in the number of faculty.

Table A2-1

Percentage Analysis of Operating Revenues by Source of Revenue in Ontario Universities

	Provincial Government Grants			Fees			Other Sources
	Formula	Other	Subtotal	Tuition	Misc.	Subtotal	
1970-71	75.5	4.1	79.6	15.8	0.9	16.7	3.7
1972-73	75.7	2.5	78.2	17.7	0.7	18.4	3.4
1973-74	74.1	3.2	77.3	18.0	0.7	18.7	3.9
1974-75	75.1	2.7	77.8	16.8	0.7	17.5	4.6
1975-76	75.7	3.4	79.0	15.9	0.9	16.8	4.2
1976-77	78.0	2.8	80.7	14.2	0.9	15.1	4.2
1977-78	77.7	2.6	80.3	15.0	0.9	15.9	3.8
1978-79	78.1	1.7	79.8	14.3	0.9	15.2	5.0
1979-80	77.7	1.8	79.5	14.4	0.9	15.4	5.1
1980-81	77.6	1.7	79.3	15.8	1.0	16.8	3.9
1981-82	76.3	1.6	77.9	16.9	1.0	17.9	4.2
1982-83	74.6	2.1	76.6	18.1	1.1	19.3	4.1
1983-84	74.4	2.5	76.8	18.8	1.2	19.9	3.3
1984-85	74.7	1.9	76.6	18.8	1.2	20.0	3.4
1985-86	74.1	2.4	76.5	18.7	1.3	20.0	3.4
1986-87	72.2	4.9	77.1	18.3	1.3	19.6	2.2

Note: The number of institutions included in the figures varies from year to year. (Refer to Footnote 1 on Table I-2 in Appendix I for details on the institutions included in each year's figures.)

Source: Financial Report of Ontario Universities, COFO-UO. Data exclude OMAF grants and MCU payments in lieu of municipal taxes.

Table A2-2

Ratios of Non-Salary Operating Expenditures (in Constant Dollars, Deflated) to Eligible FTE Enrolment in Ontario Universities

	Ontario University Non-Salary Price Index		CPI	
	Non-Salary Expenditures /FTE $	Index	Non-Salary Expenditures /FTE $	Index
1970-71	2,861	100.0	2,341	100.0
1972-73	2,350	82.1	1,902	81.2
1973-74	2,152	75.2	1,781	76.1
1974-75	1,979	69.2	1,712	73.1
1975-76	1,816	63.5	1,581	67.5
1976-77	1,773	62.0	1,576	67.3
1977-78	1,760	61.5	1,618	69.1
1978-79	1,710	59.8	1,583	67.6
1979-80	1,618	56.6	1,550	66.2
1980-81	1,542	53.9	1,493	63.8
1981-82	1,457	50.9	1,430	61.1
1982-83	1,381	48.3	1,366	58.4
1983-84	1,428	49.9	1,402	59.9
1984-85	1,429	49.9	1,438	61.4
1985-86	1,465	51.2	1,492	63.7
1986-87	1,544	54.0	1,544	66.0

Note: The number of institutions included in the figures varies from year to year. (Refer to Footnote 1 on Table I-5 in Appendix I for details on the institutions included in each year's figures.)

Source: Non-salary operating expenditures were obtained from Table I-5, enrolment from Table I-3 in Appendix I. Please refer to the footnotes for these tables.

Table A2-3

Ratio of Research Expenditures to Operating Expenditures in Ontario Universities

	Research Expenditures ($000's)	Operating Expenditures ($000's)	Research Expenditures/ Operating Expenditures
1970-71	62,471	391,663	0.160
1972-73	69,538	465,135	0.150
1973-74	75,322	512,630	0.147
1974-75	85,905	581,252	0.148
1975-76	98,323	705,758	0.139
1976-77	103,813	784,165	0.132
1977-78	125,579	860,358	0.146
1978-79	144,507	924,777	0.156
1979-80	161,768	977,856	0.165
1980-81	186,631	1,061,502	0.176
1981-82	229,486	1,193,698	0.192
1982-83	276,903	1,350,742	0.205
1983-84	295,964	1,469,933	0.201
1984-85	328,374	1,548,952	0.212
1985-86	346,606	1,654,798	0.209
1986-87	357,926	1,750,686	0.204

Note: The number of institutions included in the figures varies from year to year. (Refer to Footnote 1 on Table I-4 in Appendix I for details on the institutions included in each year's figures.)

Source: Research expenditure data were obtained from Table I-4, operating expenditure data from Table I-6 in Appendix I. Please refer to the footnotes for these tables.

Table A2-4

Ratios of BIU's to Eligible FTE Enrolment in Ontario Universities [1]

	Undergraduate			Graduate			Total		
	FTE Enrolment [2,3]	BIU's [4]	BIU/FTE Enrolment [5]	FTE Enrolment	BIU's	BIU/FTE Enrolment	FTE Enrolment	BIU's [6]	BIU/FTE Enrolment
1970-71	120,929.4	171,665.0	1.42	15,133.6	55,653.5	3.68	136,063.0	227,478.8	1.67
1972-73	145,437.0	212,496.1	1.46	16,916.2	59,173.8	3.50	162,353.2	271,907.9	1.67
1973-74	154,747.4	228,017.7	1.47	17,808.6	60,240.1	3.38	172,556.0	288,972.0	1.67
1974-75	163,708.0	243,776.0	1.49	18,420.8	61,852.7	3.36	182,128.8	306,329.4	1.68
1975-76	174,788.0	260,759.2	1.49	19,313.8	64,332.1	3.33	194,101.8	326,377.9	1.68
1976-77	177,497.2	264,345.8	1.49	18,983.9	63,933.4	3.37	196,481.0	329,436.3	1.68
1977-78	172,084.7	259,295.5	1.51	17,828.0	61,584.9	3.45	189,912.7	322,081.7	1.70
1978-79	167,786.6	255,461.1	1.52	17,662.0	60,608.5	3.43	185,448.6	316,835.8	1.71
1979-80	169,055.9	259,866.6	1.54	17,721.6	60,081.5	3.39	186,777.5	321,035.5	1.72
1980-81	175,310.1	270,109.5	1.54	17,919.3	60,816.9	3.39	193,229.4	331,956.9	1.72
1981-82	184,158.6	283,632.8	1.54	18,512.2	63,293.5	3.42	202,670.8	348,063.3	1.72
1982-83	194,847.3	298,860.5	1.53	19,060.1	66,419.9	3.48	213,907.4	366,191.8	1.71
1983-84	201,421.9	308,230.2	1.53	19,399.3	67,565.4	3.48	220,821.2	376,530.1	1.71
1984-85	202,276.1	309,111.6	1.53	19,638.3	68,741.1	3.50	221,914.4	378,381.5	1.71
1985-86	200,569.8	306,798.4	1.53	19,631.1	68,985.9	3.51	220,200.9	376,394.4	1.71
1986-87	200,975.0	307,704.1	1.53	20,045.3	70,016.1	3.49	221,020.3	377,330.9	1.71

Note: The number of institutions included in the figures varies from year to year. Data exclude OISE in 1970-71, Ryerson in 1970-71, Dominicain prior to 1973-74 and OCA prior to 1975-76. Church related affiliates are included in all years.

1. Sources: Ministry of Colleges and Universities Statistical Summary and Financial Report.

2. Commencing in 1976-77, undergraduate figures are reported as FFTE enrolment. Prior to 1976-77, the divisor used to convert course registrations into FTE of part-time undergraduate enrolment was 6 in 1970-71, 5.5 in 1972-73 and 5 in 1973-74 to 1975-76.

3. Data exclude undergraduate off-campus registrations at Waterloo.

4. Data include BIU's for church related affiliates at 100%.

5. Data include FTE of graduate summer school.

6. Data include minima-maxima adjustments for graduate entitlement and imputing adjustments.

Table A2-5

Student/Faculty Ratios in Ontario Universities

	FTE Enrolment [1]	FTE Faculty [2]	FTE Enrolment/ FTE Faculty
1970-71	125,551.6	9,756.4	12.9
1972-73	142,161.4	10,731.5	13.2
1973-74	155,505.7	11,212.5	13.9
1974-75	165,671.0	11,562.8	14.3
1975-76	177,212.7	12,133.5	14.6
1976-77	178,779.3	12,247.8	14.6
1977-78	171,972.5	12,291.5	14.0
1978-79	185,448.6	13,314.4	13.9
1979-80	186,777.5	13,095.1	14.3
1980-81	193,229.4	13,034.4	14.8
1981-82	202,670.8	13,112.5	15.5
1982-83	213,907.4	13,099.0	16.3
1983-84	220,821.2	13,276.9	16.6
1984-85	221,914.4	13,386.8	16.6
1985-86	220,200.9	13,453.9	16.4
1986-87	221,020.3	13,579.1	16.3

Note. The number of institutions included in the figures varies from year to year. Data exclude Wilfrid Laurier prior to 1973-74, OISE prior to 1975-76 and Algoma, Nipissing, Hearst, Ryerson, Regis, Dominicain, OCA and church related affiliates prior to 1978-79.

1. Sources: Ministry of Colleges and Universities Statistical Summary and Financial Report. Commencing in 1976-77, undergraduate figures are reported as FFTE enrolment. Prior to 1976-77, the divisor used to convert course registrations into FTE of part-time undergraduate enrolment was 6 in 1970-71, 5.5 in 1972-73 and 5 in 1973-74 to 1975-76. Data exclude undergraduate off-campus registrations at Waterloo but include FTE of graduate summer school.

2. FTE faculty were obtained by dividing the sum of salaries and wages for "academic ranks" and "other instruction and research" under "operating expenses" (from COFO-UO's Financial Report of Ontario Universities) by the average salary on a fiscal year basis for academic staff in the professorial ranks (from Statistics Canada's Salaries and Salary Scales of Full-Time Teaching Staff at Canadian Universities) for each institution. Commencing in 1978-79, COFO-UO salaries data for church related affiliates were included but the average salary divisor used was the average salary for the parent institution. Similarly, commencing in 1978-79, the average salary divisor used for Algoma, Nipissing, Hearst, Ryerson, Dominicain and OCA was the average salary for all universities from Table B4-1 in Part B of this compendium.

APPENDIX I

SUPPLEMENTARY SYSTEM DATA

Table I-1

Cost Indices

	For Operating Expenditures				For Research Expenditures	
	COU Combined Index [1]	Combined Index Based on Actual Academic Salary Increases [2]	Ontario University Non-Salary Price Index [3]	CPI [4]	COU Combined Research Index [5]	Combined Research Index Based on Actual Academic Salary Increases [6]
1970-71	27.6	29.4	25.2	30.8	27.0	28.4
1972-73	32.0	32.8	27.2	33.6	30.8	31.4
1973-74	34.4	34.8	30.2	36.5	33.3	33.7
1974-75	38.6	38.6	35.2	40.7	37.8	37.8
1975-76	43.5	42.9	39.0	44.8	42.4	41.9
1976-77	47.9	47.2	42.5	47.8	46.6	46.0
1977-78	52.1	51.5	47.8	52.0	51.0	50.6
1978-79	55.8	54.8	52.5	56.7	55.0	54.2
1979-80	61.1	59.5	59.3	61.9	60.6	59.5
1980-81	67.3	65.4	66.6	68.8	67.1	65.7
1981-82	75.5	73.0	75.8	77.2	75.6	73.7
1982-83	82.1	82.2	83.5	84.4	82.4	82.5
1983-84	87.9	86.3	87.2	88.8	87.7	86.5
1984-85	92.5	90.2	92.8	92.2	92.6	90.9
1985-86	96.9	95.5	97.8	96.0	97.1	96.1
1986-87	100.0	100.0	100.0	100.0	100.0	100.0

1. This index is a combination of 0.8 of a salary index and 0.2 of a non-salary index. The salary component is the industrial composite index from Statistics Canada's Employment Earnings and Hours. The non-salary component is the COU "Ontario University Non-Salary Price Index".

2. This index is a combination of 0.8 of a salary index and 0.2 of a non-salary index. The salary component has been derived from actual average salary data for full, associate and assistant professors as reported in Statistics Canada's Salaries and Salary Scales of Full-Time Teaching Staff at Canadian Universities. The non-salary component is the COU "Ontario University Non-Salary Price Index".

3. Source: The Financial Position of Universities in Ontario: 1988. COU Committee on Operating Grants, Council of Ontario Universities, June, 1988.

4. Source: The Consumer Price Index, Statistics Canada, monthly.

5. This index is similar to 1 above but uses a combination of 0.6 of the salary index and 0.4 of the non-salary index.

6. This index is similar to 2 above but uses a combination of 0.6 of the salary index and 0.4 of the non-salary index.

Table I-2

Determination of Operating Revenue in Constant Dollars

	Operating Revenue in Current Dollars [1]	Operating Revenue in Constant Dollars, Deflated by:		
	($000's)	COU Combined Index [2] ($000's)	Combined Index Based on Actual Academic Salary Increases [3] ($000's)	CPI [4] ($000's)
1970-71	391,295	1,417,736	1,330,935	1,270,438
1972-73	465,744	1,455,450	1,419,951	1,386,143
1973-74	510,319	1,483,485	1,466,434	1,398,134
1974-75	578,732	1,499,306	1,499,306	1,421,946
1975-76	702,865	1,615,782	1,638,380	1,568,895
1976-77	790,899	1,651,148	1,675,633	1,654,600
1977-78	885,136	1,660,530	1,679,676	1,663,723
1978-79	934,932	1,675,505	1,706,080	1,648,910
1979-80	985,976	1,613,709	1,657,103	1,592,853
1980-81	1,080,314	1,575,504	1,621,275	1,541,154
1981-82	1,188,184	1,573,754	1,627,649	1,539,098
1982-83	1,365,621	1,663,363	1,661,339	1,618,034
1983-84	1,472,278	1,674,947	1,706,000	1,657,971
1984-85	1,556,461	1,682,861	1,725,567	1,687 136
1985-86	1,643,767	1,696,354	1,721,222	1,712,257
1986-87	1,753,793	1,753,793	1,753,793	1,753,793

1. Source: Financial Report of Ontario Universities, COFO-UO. Data exclude OMAF grants, MCU payments in lieu of municipal taxes, church related affiliates prior to 1978-79 (the arts and science component at Toronto has been included since 1974-75), Algoma in 1970-71, 1972-73, 1973-74, 1975-76 and 1976-77, Nipissing in 1970-71, Hearst in 1970-71, OCA prior to 1977-78, OISE prior to 1975-76, Ryerson prior to 1975-76 and Wilfrid Laurier prior to 1973-74.

2. This index is a combination of 0.8 of a salary index and 0.2 of a non-salary index. The salary component is the industrial composite index from Statistics Canada's Employment Earnings and Hours. The non-salary component is the COU "Ontario University Non-Salary Price Index".

3. This index is a combination of 0.8 of a salary index and 0.2 of a non-salary index. The salary component has been derived from actual average salary data for full, associate and assistant professors as reported in Statistics Canada's Salaries and Salary Scales of Full-Time Teaching Staff at Canadian Universities. The non-salary component is the COU "Ontario University Non-Salary Price Index".

4. Source: The Consumer Price Index, Statistics Canada, monthly.

Table I-3

Eligible FTE Enrolment and BIU's in Ontario Universities [1]
(for those institutions included in COFO-UO reports)

	FTE Enrolment [2,3]	BIU's [4]
1970-71	125,551.8	215,556.8
1972-73	142,579.0	247,533.7
1973-74	156,057.5	268,090.3
1974-75	166,930.8	285,421.7
1975-76	187,866.2	319,243.1
1976-77	189,763.6	321,781.1
1977-78	185,145.1	316,867.6
1978-79	185,448.6	316,835.8
1979-80	186,777.5	321,035.5
1980-81	193,229.4	331,956.9
1981-82	202,670.8	348,063.3
1982-83	213,907.4	366,191.8
1983-84	220,821.2	376,530.1
1984-85	221,914.4	378,381.5
1985-86	220,200.9	376,394.4
1986-87	221,020.3	377,330.9

1. Sources: Ministry of Colleges and Universities Statistical Summary and Financial Report. From 1974-75 to 1977-78, additional data for church related affiliates were provided by the parent universities. Data exclude Algoma in 1971-72, 1972-73, 1973-74, 1975-76 and 1976-77, Nipissing in 1970-71, Hearst in 1970-71, OCA prior to 1977-78, OISE prior to 1975-76, Ryerson prior to 1975-76 and Wilfrid Laurier prior to 1973-74. Prior to 1978-79, students enrolled in church related institutions were excluded (with the exception of Toronto which included students in arts and science programmes commencing in 1974-75).

2. Commencing in 1976-77, undergraduate figures are reported as FFTE enrolment. Prior to 1976-77, the divisor used to convert course registrations into FTE of part-time undergraduate enrolment was 6 in 1970-71, 5.5 in 1972-73 and 5 in 1973-74 to 1975-76.

3. Data include FTE of graduate summer school but exclude undergraduate off-campus registrations at Waterloo.

4. Data include minima-maxima adjustments for graduate entitlement and imputing adjustments.

Table I-4

Determination of Research Expenditures in Constant Dollars

	Research Expenditures in Current Dollars [1,2]	Research Expenditures in Constant Dollars, Deflated by:		
	($000's)	COU Combined Research Index [3] ($000's)	Combined Research Index Based on Actual Academic Salary Increases [4] ($000's)	CPI [5] ($000's)
1970-71	62,471	231,374	219,968	202,828
1972-73	69,538	225,773	221,459	206,958
1973-74	75,322	226,192	223,507	206,362
1974-75	85,905	227,262	227,262	211,069
1975-76	98,323	231,894	234,661	219,471
1976-77	103,813	222,775	225,680	217,182
1977-78	125,579	246,233	248,180	241,498
1978-79	144,507	262,740	266,618	254,862
1979-80	161,768	266,944	271,879	261,338
1980-81	186,631	278,139	284,065	271,266
1981-82	229,486	303,553	311,379	297,262
1982-83	276,903	336,047	335,640	328,084
1983-84	295,964	337,473	342,155	333,293
1984-85	328,374	354,616	361,248	356,154
1985-86	346,606	356,958	360,672	361,048
1986-87	357,926	357,926	357,926	357,926

1. Source: Financial Report of Ontario Universities, COFO-UO. Data include OMAF grants but exclude church related affiliates (the arts and science component at Toronto has been included since 1974-75), Algoma, Nipissing, Hearst, OCA and Ryerson, OISE prior to 1975-76, and Wilfrid Laurier prior to 1973-74.

2. COFO-UO figures were augmented by estimates provided by the University of Guelph of the direct costs of the research portion of the OMAF programme.

3. This index is a combination of 0.6 of a salary index and 0.4 of a non-salary index. The salary component is the industrial composite index from Statistics Canada's Employment Earnings and Hours. The non-salary component is the COU "Ontario University Non-Salary Price Index".

4. This index is a combination of 0.6 of a salary index and 0.4 of a non-salary index. The salary component has been derived from actual average salary data for full, associate and assistant professors as reported in Statistics Canada's Salaries and Salary Scales of Full-Time Teaching Staff at Canadian Universities. The non-salary component is the COU "Ontario University Non-Salary Price Index".

5. Source: The Consumer Price Index, Statistics Canada, monthly.

Table I-5

Determination of Non-Salary Operating Expenditures in Constant Dollars

	Non-Salary Operating Expenditures in Current Dollars [1,2]	Non-Salary Operating Expenditures in Constant Dollars Deflated by:	
	($000's)	Ontario University Non-Salary Price Index [3] ($000's)	CPI [4] ($000's)
1970-71	90,522	359,214	293,903
1972-73	91,129	335,033	271,217
1973-74	101,429	335,858	277,888
1974-75	116,303	330,406	285,757
1975-76	133,073	341,213	297,038
1976-77	142,972	336,405	299,105
1977-78	155,801	325,944	299,617
1978-79	166,494	317,131	293,640
1979-80	179,163	302,130	289,439
1980-81	198,479	298,017	288,487
1981-82	223,797	295,247	289,892
1982-83	246,649	295,388	292,238
1983-84	274,944	315,303	309,622
1984-85	294,289	317,122	319,185
1985-86	315,485	322,582	328,630
1986-87	341,306	341,306	341,306

1. Source: Financial Report of Ontario Universities, COFO-UO. Data exclude OMAF grants, MCU payments in lieu of municipal taxes, church related affiliates prior to 1978-79 (the arts and science component at Toronto has been included since 1974-75), Algoma in 1970-71, 1972-73, 1973-74, 1975-76 and 1976-77, Nipissing in 1970-71, Hearst in 1970-71, OCA prior to 1977-78, OISE prior to 1975-76, Ryerson prior to 1975-76 and Wilfrid Laurier prior to 1973-74.

2. The following adjustments have been made to the figures reported by COFO-UO:
   a) The salaries portion of "renovations and alterations" (assumed to be 60%) has been deleted.
   b) The salaries portion of "external contracted services" (assumed to be 75%) has been deleted.
   c) The salaries portion of "internal cost allocations" (assumed to be 60%) has been deleted.

3. Source: The Financial Position of Universities in Ontario: 1988. COU Committee on Operating Grants, Council of Ontario Universities, June, 1988.

4. Source: The Consumer Price Index, Statistics Canada, monthly.

Table I-6

Determination of Operating Expenditures in Constant Dollars

	Operating Expenditures in Current Dollars [1]	Operating Expenditures in Constant Dollars, Deflated by		
	($000's)	COU Combined Index [2] ($000's)	Combined Index Based on Actual Academic Salary Increases [3] ($000's)	CPI [4] ($000's)
1970-71	391,663	1,419,069	1,332,187	1,271,633
1972-73	485,135	1,453,547	1,418,095	1,384,330
1973-74	512,630	1,490,203	1,473,075	1,404,466
1974-75	581,252	1,505,834	1,505,834	1,428,138
1975-76	705,758	1,622,432	1,645,124	1,575,353
1976-77	784,165	1,637,088	1,661,367	1,640,513
1977-78	860,358	1,651,359	1,670,598	1,654,535
1978-79	924,777	1,657,306	1,687,549	1,631,000
1979-80	977,856	1,600,419	1,543,455	1,578,735
1980-81	1,061,502	1,577,289	1,623,092	1,542,881
1981-82	1,193,698	1,581,057	1,635,203	1,548,241
1982-83	1,350,742	1,645,240	1,643,238	1,600,405
1983-84	1,469,933	1,672,279	1,703,283	1,655,330
1984-85	1,548,952	1,674,543	1,717,242	1,679,991
1985-86	1,654,798	1,707,738	1,732,773	1,723,748
1986-87	1,750,686	1,750,686	1,750,686	1,750,686

1. Source: Financial Report of Ontario Universities, COFO-UO. Data exclude OMAF grants, MCU payments in lieu of municipal taxes, church related affiliates prior to 1978-79 (the arts and science component at Toronto has been included since 1974-75), Algoma in 1970-71, 1972-73, 1973-74, 1975-76 and 1976-77, Nipissing in 1970-71, Hearst in 1970-71, OCA prior to 1977-78, OISE prior to 1975-76, Ryerson prior to 1975-76 and Wilfrid Laurier prior to 1973-74.

2. This index is a combination of 0.8 of a salary index and 0.2 of a non-salary index. The salary component is the industrial composite index from Statistics Canada's Employment Earnings and Hours. The non-salary component is the COU "Ontario University Non-Salary Price Index".

3. This index is a combination of 0.8 of a salary index and 0.2 of a non-salary index. The salary component has been derived from actual average salary data for full, associate and assistant professors as reported in Statistics Canada's Salaries and Salary Scales of Full-Time Teaching Staff at Canadian Universities. The non-salary component is the COU "Ontario University Non-Salary Price Index".

4. Source: The Consumer Price Index, Statistics Canada, monthly.

APPENDIX II

GLOSSARY OF TERMS AND DEFINITIONS

GLOSSARY OF TERMS AND DEFINITIONS

Academic salaries as used in this compendium refer to the average annual rates of salary for full-time teaching staff in the professorial ranks, i.e. full professor, associate professor and assistant professor.

BIU (Basic Income Unit) as defined in the MCU *Ontario Operating Formula Manual* is the basic funding unit used in the Ontario Operating Grants Formula and is intended to represent two terms of general degree work offered in a liberal arts college. Work in honours, professional and graduate programmes is weighted on a rough cost basis to this basic unit. Total enrolment of each institution is converted into "basic income units" by applying this weighting scheme and then multiplied by the current value of the BIU to produce basic operating income (BOI).

Church related affiliates refers to the federated and affiliated denominational universities and colleges that are affiliated with, and funded through, the provincially assisted universities. In 1978-79 the church related affiliates were Huntington University, University of Sudbury, Thorneloe University, McMaster Divinity College, St. Augustine's Seminary, Universite St. Paul, Queen's Theological College, Knox College, University of St. Michael's College, University of Trinity College, Wycliffe College, Victoria University, Regis College, Conrad Grebel College, St. Paul's College, Renison College, University of St. Jerome's College, Brescia College, Huron College, King's College and St. Peter's Seminary, Waterloo Lutheran Seminary and Dominicain College.

COFO-UO (Council of Finance Officers-Universities of Ontario) is an organization affiliated to the Council of Ontario Universities. Membership is composed of the senior financial officers at each of the provincially assisted universities of Ontario. The organization was formed to promote discussion and exchange of information among the membership and to provide advice and assistance on financial and other related matters to COU and its committees and to other agencies as appropriate.

Constant dollars are current dollars which have been deflated by means of an index (relative to a stated base year) to account for the decreased purchasing power of the dollar over time due to the effects of inflation.

CPI (Consumer Price Index) is the most widely-known price index used in Canada. Prepared by Statistics Canada, the CPI measures the percentage change through time

in the cost of purchasing a constant "basket" of goods and services representing the purchases by a particular population group in a specified time period.

Eligible enrolment as defined in the MCU *Ontario Operating Formula Manual* refers to those students or programmes approved for formula funding support by the Ministry of Colleges and Universities. As the rules governing eligibility are subject to minor change from year to year, reference should be made to the MCU *Formula Manual* for a list of eligible students in a particular year.

Externally contracted services - This COFO-UO object of expense category includes all expenses for services which may be contracted to external agencies (except for renovations and alterations), e.g. cleaning contracts, security services and computing services.

Fiscal year is the university financial year. Since 1972-73 the university fiscal year has run from 1 May to 30 April.

Formula grants for each institution are calculated by deducting the standard fees (which vary by programme of study) for the institution from its basic operating income (see BIU).

FTE (Full-Time Equivalent) Enrolment represents full-time enrolment headcounts counted at unity plus part-time enrolment converted into FTE's of full-time enrolment. Part-time graduate students were converted by multiplying headcounts by 0.3. Part-time undergraduate students were converted by dividing course registration by a conversion factor (6.0 in 1970-71, 5.5 in 1972-73 and 5.0 in following years). Note: commencing in 1976-77, a new method of counting undergraduate enrolment was employed - see FFTE.

FFTE (Fiscal Full-Time Equivalent) Enrolment - Commencing in 1976-77 undergraduate enrolment (both full-time and part-time) was counted in the following manner. For each undergraduate student in a degree or diploma programme, the fiscal full-time equivalent enrolment for a term was calculated by dividing the units of study for that term by the normal full-time study load for the academic year for the programme. The fiscal full-time equivalent enrolment for the fiscal year is the sum of fiscal full-time equivalents for each term within that fiscal year.

Gross provincial expenditure refers to the total expenditures by a province in any given fiscal year. There are some problems in ensuring that the provincial budgetary expenditure data as shown in the provincial public accounts are consistent for all jurisdictions as certain items, such as expenditures of special

funds, may be treated differently by each province. Statistics Canada has attempted to alleviate this problem by developing a measure called "Gross General Expenditure" which has been used as a measure of gross provincial expenditure. This measure incorporates budgetary expenditures as reported in the public accounts as well as expenditures of a number of government agencies.

Imputing adjustments as defined in the MCU *Ontario Operating Formula Manual* are adjustments made in the year following the reporting of estimated enrolments in first year in the programmes at a university which offers a common first year. These adjustments are based on the programmes actually taken by the students in their second year of study. A more detailed explanation may be found in the MCU *Formula Manual*.

Instruction and research salaries as reported by COFO-UO includes two object of expense categories under "salaries and wages" - "academic ranks" and "other instruction and research". "Academic ranks" includes salaries paid to academic staff from lecturers to deans inclusive (both full and part-time) in faculties, academic departments or programmes, summer schools, credit extension courses and other academic functions and salary payment to staff members on paid academic leave. "Other instruction and research" includes payments to staff members without academic rank who are engaged in instruction and research as instructors, tutors, markers, demonstrators, teaching assistants, research assistants, invigilators, clinical assistants, post-doctoral fellows and includes payments made to graduate and undergraduate students undertaking these activities.

Internal cost allocation - This COFO-UO object of expense category is used for reporting internal transfers of costs among funds (e.g. operating, ancillary enterprises, sponsored research) within an institution.

Minima-maxima adjustments are adjustments made to graduate student BIU's reported by a university to ensure funding within a defined range independent of the actual number of years required by the individual student to complete his programme of study. A more detailed explanation may be found in the MCU *Formula Manual*.

Net teaching service refers to the net effect of the cross teaching between a provincially assisted university and its church related affiliates. Students who are registered at the affiliated institution may, in fact, receive all or part of their instruction from the provincially assisted university, or vice versa. Enrolment reported on a net teaching service basis is based on the net effect of this cross teaching rather than on where the students may be registered.

Non-academic salaries - This COFO-UO object of expense (labelled "other salaries and wages" in the COFO-UO report) includes salaries, wages and payments to non-instructional staff (support staff) including among others, technicians, clerical and secretarial, administrative and physical plant personnel. All salaries reported under functional areas other than instruction and research are included in this object of expense even though certain individuals may hold the equivalent of an academic rank.

Operating expenditures (or revenue) - As defined by COFO-UO the operating fund accounts for the cost of instruction, academic support services, administrative, plant maintenance and other operating expenses of the university financed by fees, grants and other general income. This fund will normally include all revenues and expenses which the university considers to be operating, within the functional operating areas instruction and (non-sponsored) research, library, computing, student services, administration, physical plant and other operating.

Operating grants are grants received from the government of the province in which the institution is located which are classified as income in the operating fund of the institution. Included are grants provided by all provincial ministries in support of academic programmes and/or general research and grants for system-wide cooperative projects (excepting grants to government advisory bodies). Excluded are grants for ancillary enterprises, non-credit instruction, municipal tax relief, provincially sponsored research, student aid, scholarships and capital projects.

Operating grants plus fees - In addition to operating grants (described above), this category includes tuition fees for credit programmes and miscellaneous fees (e.g. library fees, athletic fees, health service fees, graduation fees, laboratory or equipment fees, materials or breakage charges, fines and other fees that become income to the university). Excluded are revenue from non-credit course fees, residence fees, parking charges, student union levies, other ancillary fees and fees collected on behalf of another agency.

Operating income is defined as all income received for or transferred to meet the operating expenditures of university-level programmes. Excluded are capital funds (those funds which are designated for new buildings, major additions to existing buildings, building rental where there is a major component of operating expenditures in the province, debt servicing charges and land purchases), trust and endowment funds, sponsored research funds, ancillary enterprise funds, provincial government grants designated for property taxes or grants in lieu of taxes (as well as institutional payments to municipalities relating to property taxes), student assistance (grants and scholarships paid directly to the student by the provincial government or from institutional trust and endowment funds and

loans from any source) and debenture repayments from both operating revenue and expenditure.

OUNSPI (Ontario University Non Salary Price Index) is a tool to assist in measuring the impact of inflation on non-salary expenditure in universities and a more accurate measure of the extent of inflationary erosion between any two years. Initially developed by COFO-UO, OUNSPI was first published in 1978.

Payments in lieu of municipal taxes are MCU grants to the Ontario universities individually designated for payment of municipal property taxes.

Provincial gross domestic product measures provincial output as the sum of incomes received by the factors of production, e.g. labour income, corporation products, farm income, etc Data were obtained from Statistics Canada's *Experimental Data on Provincial Economic Accounts*.

Provincial personal income is defined as total income for the provincial population derived from wages, salaries and supplementary labour income, military pay and allowances, net income of farm operators and unincorporated business, interest, dividends and miscellaneous investment income, and current transfers from government, corporations and non-residents. These data were obtained from Statistics Canada's CANSIM system.

Provincially assisted universities of Ontario (as of 1978-79) include Brock University, Carleton University, University of Guelph, Lakehead University, Laurentian University, Algoma University College, Nipissing University College, Le College Universitaire de Hearst, McMaster University, Ontario College of Art, Ontario Institute for Studies in Education, University of Ottawa, Queen's University, Ryerson Polytechnical Institute, University of Toronto, Trent University, University of Waterloo, University of Western Ontario, Wilfrid Laurier University, University of Windsor, and York University.

Research expenditures as used in this compendium refers to "sponsored research".

Sponsored research - As defined by COFO-UO, this fund accounts for government and private sources of external grant support available and expended on research activities and projects. Expenses may include overhead charges by the university.